



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

July 29, 2019

LR-16J

**VIA CERTIFIED MAIL #70170530000012675918**  
**AND ELECTRONIC MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. John R. Hill  
Sr. Engineer Environmental Affairs  
ArcelorMittal USA  
4020 Kinross Lakes Parkway  
Richfield, OH 44286-9000

**RE: Review of Pre-Design Report Former Coke Plant, Tecumseh Redevelopment, Inc.  
and Pre Design Report Addendum for Former Coke Plant Area in East Chicago,  
Indiana  
ArcelorMittal USA LLC – Indiana Harbor West  
EPA ID No. IND 005 462 601  
EPA Docket No. R 3013-5-03-002**

Dear Mr. Hill

The U.S. Environmental Protection Agency has reviewed the December 2018 *Pre-Design Report Former Coke Plant Tecumseh Redevelopment, Inc.* (Report) and the June 2019 *Pre-Design Report Addendum for Former Coke Plant Area* (Addendum) submitted to EPA by ArcelorMittal, USA. The EPA's comments on the Report and Addendum are enclosed.

If you have any questions about this letter, please contact me at (312) 353-9229 or Melissa Blankenship at (312) 886-9641.

Sincerely,

A handwritten signature in black ink, appearing to read "Brandon Pursel", is written over a horizontal line.

Brandon Pursel  
Project Manager, Corrective Action Section 3  
Land, Chemicals & Redevelopment Division

Enclosure

cc: Cary Mathias (ArcelorMittal)

## **EPA Comments on the Pre-Design Report Former Coke Plant, Tecumseh Redevelopment, Inc. and Pre-Design Report Addendum for Former Coke Plant Area**

ArcelorMittal submitted the Pre-Design Report dated December 2018 and Addendum dated June 2019 for the Former Coke Plant at the ArcelorMittal Indiana Harbor West facility located in East Chicago, Indiana. The two submittals document preliminary remedial considerations including small scale pilot studies and expanded investigations utilizing high resolution characterization techniques. Conclusions and recommendations are provided in the submittals by ArcelorMittal based on those considerations and studies.

### **General Comment on Pre-Design Report**

**Executive Summary** The Executive Summary concludes that the “Pre-Design Investigative information documented in this Pre-Design Report has defined the magnitude and extent of impacts and is therefore sufficient to complete a CMS [corrective measures study] for the site.”

EPA recommends that ArcelorMittal (AM) develop and submit to EPA a Remedial Study that includes, but is not limited to, the following for the Former Coke Plant Area:

- Describe current conditions;
- Develop a Conceptual Site Model including risk assessments based on current conditions;
- Propose Clean-up objectives;
- Based on the Pre-Design Report, identify, evaluate and develop corrective action alternatives to achieve clean-up objectives using threshold and balancing criteria;
- Recommend and provide justification for the preferred corrective action alternative;
- A discussion of financial assurance mechanisms to be put in place to ensure active remedies and long-term operation and maintenance schedules can continue

### **Specific Comments on Pre-Design Report**

**Section 2.3 Conceptual Site Model** This section includes language that “the West Mill is a heavily industrialized facility and will continue to be in the foreseeable future” and that “groundwater on the peninsula is not used as drinking water”. Arcelor Mittal (AM) proposes groundwater use restrictions for the entire facility.

**EPA Specific Comment # 1** AM must describe what controls will be in place to restrict groundwater use on the property in the Remedial Study of the Former Coke Plant Area.

**Section 8.1.3 Extent of Impacted Groundwater** This section states that “with respect to shallow groundwater, the eastern extent of the benzene-impacted groundwater has not been defined in the vicinity of monitoring well MW-832...” and “with regard to deep groundwater, the eastern extent of benzene-impacted groundwater has not been defined in the vicinity of monitoring wells MW-832D and MW-806D.” AM concludes “the extent of impacts to the east of these monitoring wells is precluded by the presence of the railway corridor located adjacent east of the former Coke Plant.”

EPA Specific Comment # 2 On April 25, 2019 EPA and AM met and toured the ArcelorMittal West Facility including the Former Coke Plant area and discussed the specific issue of delineating the extent of groundwater contamination. EPA communicated to AM that it must delineate groundwater contamination to the east/northeast to achieve full delineation of the extent of impacts to groundwater. It was unclear whether all feasible options for delineating the plume to the east/northeast were evaluated. EPA requested that AM identify the nearest possible sampling locations practicable near the railroad tracks to better define the extent of groundwater contamination to the east/northeast. AM submitted an addendum to the Pre-Design Report on June 10, 2019 in response to EPA's request.

### **Comment on the Pre-Design Report Addendum**

The Addendum contains information about regional groundwater flow directions, relevant historical groundwater quality data, and the status of occupancy of buildings located immediately to the north of the railroad corridor that is adjacent to the Former Coke Plant. Based on the information provided in the Addendum, AM requests that "EPA concur that no additional monitoring wells are necessary because the extent of benzene-impacted groundwater is defined and that given the absence of benzene impacts in groundwater monitoring wells located to the northeast of the railroad tracks, there is no vapor intrusion risk to buildings located within this portion of the site. Moreover, the buildings located within this portion of the site are unoccupied."

EPA acknowledges that AM provided information from a 2005 sampling event including three shallow wells (MW-101S, MW-102S, MW-103S) and one deep well (MW-101D) immediately to the north of the railroad corridor that is adjacent to the Former Coke Plant across the railroad tracks, that shows benzene was not detected at the time. EPA does not foresee that any additional wells will be necessary to delineate groundwater contamination in the east/northeast area of the former Coke Plant, however, EPA recommends taking an adaptive approach to groundwater monitoring. For example, if new or different information related to the contamination is discovered through implementation of any remedies, EPA may direct AM to take such actions as installing additional monitoring wells it finds necessary.